UNITED STATES DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE

CLASSIFICATION AND CORRELATION OF THE SOILS OF BOONE COUNTY, INDIANA

A SUBSET OF MLRA 111

February 2003

This correlation was prepared by Bennie Clark, Jr., MLRA Project Leader, Indianapolis, IN; Tonie Endres, Soil Data Quality Specialist (SDQS), MLRA Region 11, Indianapolis, IN; and Mike Wigginton, MLRA Subset Leader, Indianapolis, IN. It was prepared as part of the update of the Soil Survey of Boone County, Indiana, a subset of MLRA 111. This correlation is based on transect data, pedon descriptions, laboratory data, and field soil maps of Boone County. This correlation is supported by NASIS legend and NASIS Data Mapunits.

HEADNOTE FOR DETAILED SOIL SURVEY LEGEND

This update of Boone County, Indiana is an update subset of the Soil Survey of Major Land Resource Area (MLRA) 111. Map units, the representative map unit symbols, and special and conventional symbols are consistent between subsets that are being updated. Map unit symbols consist of a combination of letters and numbers. The initial letters represent the kind of soil. A capital letter following the first three letters indicates the class of slope. A second capital letter indicates the flooding frequency and duration. The letter H indicates the soil is frequently flooded for brief duration, the letter W indicates the soil is occasionally flooded for very brief duration, and the letter P indicates the soil is ponded for brief duration. A final number of 2 following the slope letter indicates that the soil is moderately eroded, and a number 3 indicates that it is severely eroded. Absence of a number following the slope class indicates that the soil is slightly eroded or non-eroded.

 Field symbols 	 Field map unit name 	 Publi- cation symbol	Approved map unit name
CbaA	Camden silt loam, 0 to 2 percent slopes	CbaA	Camden silt loam, 0 to 2 percent slopes
OcA	Ockley silt loam, 0 to 2 percent slopes	 CbaA	
CrA	Crosby silt loam, 0 to 3 percent slopes	 CudA	Crosby silt loam, 0 to 2 percent slopes
CudA	Crosby silt loam, 0 to 2 percent slopes	CudA	Crosby silt loam, 0 to 2 percent slopes
CxdA	Cyclone silty clay loam, 0 to 1 percent slopes	CxdA	Cyclone silty clay loam, 0 to 1 percent slopes
Ra	Ragsdale silty clay loam	CxdA	Cyclone silty clay loam, 0 to 1 percent slopes
 RbfA 	Ragsdale silty clay loam, 0 to 1 percent slopes	 CxdA 	Cyclone silty clay loam, 0 to 1 percent slopes
 EdeAK 	Eel and Beckville soils, 0 to 2 percent slopes, occasionally flooded, brief duration	 EdeAW 	Eel and Beckville soils, 0 to 2 percent slopes, occasionally flooded, very brief duration
 EdeAW 	Eel and Beckville soils, 0 to 2 percent slopes, occasionally flooded, very brief duration	 EdeAW 	Eel and Beckville soils, 0 to 2 percent slopes, occasionally flooded, very brief duration
Gn 	Genesee silt loam	 EdeAW 	Eel and Beckville soils, 0 to 2 percent slopes, occasionally flooded, very brief duration
FcA	Fincastle silt loam, 0 to 3 percent slopes	FdbA	Fincastle silt loam, 0 to 2 percent slopes
 FdbA	Fincastle silt loam, 0 to 2 percent slopes	 FdbA	Fincastle silt loam, 0 to 2 percent slopes
Re	Reesville silt loam	 FdbA	Fincastle silt loam, 0 to 2 percent slopes
CrA	Crosby silt loam, 0 to 3 percent slopes	 FdhA 	Fincastle-Crosby silt loams, 0 to 2 percent slopes
 FdhA 	Fincastle-Crosby silt loams, 0 to 2 percent slopes	 FdhA 	Fincastle-Crosby silt loams, 0 to 2 percent slopes
FexB2	Fox loam, 2 to 6 percent slopes, eroded	FexB2	Fox loam, 2 to 6 percent slopes, eroded
 FsB2	Fox silt loam, 2 to 6 percent slopes, eroded	FexB2	Fox loam, 2 to 6 percent slopes, eroded
FexC2	Fox loam, 6 to 12 percent slopes, eroded	FexC2	Fox loam, 6 to 12 percent slopes, eroded
FsC2	Fox silt loam, 6 to 12 percent slopes, eroded	FexC2	Fox loam, 6 to 12 percent slopes, eroded
 Ma 	Mahalasville silty clay loam	 MamA 	Mahalasville silty clay loam, 0 to 1 percent slopes
 MamA 	Mahalasville silty clay loam, 0 to 1 percent slopes	 MamA 	Mahalasville silty clay loam, 0 to 1 percent slopes
 Ma 	Mahalasville silty clay loam	 MaoA 	Mahalaland silty clay loam, 0 to 1 percent slopes
 MaoA 	Mahalaland silty clay loam, 0 to 1 percent slopes	 MaoA 	Mahalaland silty clay loam, 0 to 1 percent slopes
 We	Westland silty clay loam	 MaoA 	Mahalaland silty clay loam, 0 to 1 percent slopes
 EdeAK 	Eel and Beckville soils, 0 to 2 percent slopes, occasionally flooded, brief duration	 MjkAH 	Medway and Beckville soils, 0 to 2 percent slopes, frequently flooded, brief duration
 Gn 	Genesee silt loam	 MjkAH 	Medway and Beckville soils, 0 to 2 percent slopes, frequently flooded, brief duration
 MjkAH 	Medway and Beckville soils, 0 to 2 percent slopes, frequently flooded, brief duration	 MjkAH 	Medway and Beckville soils, 0 to 2 percent slopes, frequently flooded, brief duration

Field symbols	Field map unit name	Publi- cation symbol	Approved map unit name
MmoB3	Miami clay loam, 2 to 6 percent slopes, severely eroded	MmoB3	Miami clay loam, 2 to 6 percent slopes, severely eroded
MsB3	Miami clay loam, 2 to 6 percent slopes, severely eroded	MmoB3	Miami clay loam, 2 to 6 percent slopes, severely eroded
MmoC3	Miami clay loam, 6 to 12 percent slopes, severely eroded	MmoC3	Miami clay loam, 6 to 12 percent slopes, severely eroded
MsC3	Miami clay loam, 6 to 12 percent slopes, severely eroded	MmoC3	Miami clay loam, 6 to 12 percent slopes, severely eroded
MmoD3	Miami clay loam, 12 to 18 percent slopes, severely eroded	MmoD3	Miami clay loam, 12 to 18 percent slopes, severely eroded
MsD3	Miami clay loam, 12 to 18 percent slopes, severely eroded	 MmoD3 	Miami clay loam, 12 to 18 percent slopes, severely eroded
MmB2	Miami silt loam, 2 to 6 percent slopes, eroded	MnpB2	Miami silt loam, 2 to 6 percent slopes, eroded
MnpB2	Miami silt loam, 2 to 6 percent slopes, eroded	MnpB2	Miami silt loam, 2 to 6 percent slopes, eroded
MmC2	Miami silt loam, 6 to 12 percent slopes, eroded	 MnpC2	Miami silt loam, 6 to 12 percent slopes, eroded
MnpC2	Miami silt loam, 6 to 12 percent slopes, eroded	 MnpC2 	Miami silt loam, 6 to 12 percent slopes, eroded
MmD2	Miami silt loam, 12 to 18 percent slopes, eroded	 MnpD2 	Miami silt loam, 12 to 18 percent slopes, eroded
MnpD2	Miami silt loam, 12 to 18 percent slopes, eroded	 MnpD2 	Miami silt loam, 12 to 18 percent slopes, eroded
FsA	Fox silt loam, 0 to 2 percent slopes	ObxA	Ockley silt loam, 0 to 2 percent slopes
ObxA	Ockley silt loam, 0 to 2 percent slopes	ObxA	Ockley silt loam, 0 to 2 percent slopes
OcA	Ockley silt loam, 0 to 2 percent slopes	ObxA	Ockley silt loam, 0 to 2 percent slopes
ObxB2	Ockley silt loam, 2 to 6 percent slopes, eroded	ObxB2	Ockley silt loam, 2 to 6 percent slopes, eroded
OcB2	Ockley silt loam, 2 to 6 percent slopes, eroded	ObxB2	Ockley silt loam, 2 to 6 percent slopes, eroded
Gravel	Gravel Pit	Ppu	Pits, sand and gravel
Ppu	Pits, sand and gravel	Ppu	Pits, sand and gravel
OcA	Ockley silt loam, 0 to 2 percent slopes	 RqpG 	Rodman-Rock outcrop complex, 35 to 70 percent slopes
RqpG	Rodman-Rock outcrop complex, 35 to 70 percent slopes	 RqpG 	Rodman-Rock outcrop complex, 35 to 70 percent slopes
EdeAK	Eel and Beckville soils, 0 to 2 percent slopes, occasionally flooded, brief duration	 RtuAH 	Rossburg and Landes soils, 0 to 2 percent slopes, frequently flooded, brief duration
Gn	 Genesee silt loam 	 RtuAH	Rossburg and Landes soils, 0 to 2 percent slopes, frequently flooded, brief duration
RtuAH	Rossburg and Landes soils, 0 to 2 percent slopes, frequently flooded, brief duration	 RtuAH 	Rossburg and Landes soils, 0 to 2 percent slopes, frequently flooded, brief duration
MmE 2	Miami silt loam, 18 to 25 percent slopes, eroded	 SigE2	 Senachwine silt loam, 18 to 25 percent slopes, eroded
SigE2	 Senachwine silt loam, 18 to 25 percent slopes, eroded	 SigE2 	 Senachwine silt loam, 18 to 25 percent slopes, eroded

Field symbols	Field map unit name		Approved map unit name
Sh	Shoals silt loam	 SldAH 	Shoals silt loam, 0 to 2 percent slopes, frequently flooded, brief duration
SldAH	Shoals silt loam, 0 to 2 percent slopes, frequently flooded, brief duration	SldAH	Shoals silt loam, 0 to 2 percent slopes, frequently flooded, brief duration
Sh	Shoals silt loam	SldAW	Shoals silt loam, 0 to 2 percent slopes, occasionally flooded, very brief duration
SldAW	Shoals silt loam, 0 to 2 percent slopes, occasionally flooded, very brief duration	SldAW	Shoals silt loam, 0 to 2 percent slopes, occasionally flooded, very brief duration
SngA	Sleeth silt loam, 0 to 2 percent slopes	SngA	Sleeth silt loam, 0 to 2 percent slopes
St	Sleeth silt loam	SngA	Sleeth silt loam, 0 to 2 percent slopes
Br	Brookston silt loam, overwash	 SnlAP 	Southwest silt loam, 0 to 1 percent slopes, ponded, brief duration
SnlAP	Southwest silt loam, 0 to 1 percent slopes, ponded, brief duration	SnlAP	Southwest silt loam, 0 to 1 percent slopes, ponded, brief duration
SocAH	Sloan silty clay loam, 0 to 1 percent slopes, frequently flooded, brief duration	SocAH	Sloan silty clay loam, 0 to 1 percent slopes, frequently flooded, brief duration
Sx	Sloan silt loam	SocAH	Sloan silty clay loam, 0 to 1 percent slopes, frequently flooded, brief duration
SocAW	Sloan silty clay loam, 0 to 1 percent slopes, occasionally flooded, very brief duration	SocAW	Sloan silty clay loam, 0 to 1 percent slopes, occasionally flooded, very brief duration
Sx	Sloan silt loam	SocAW	Sloan silty clay loam, 0 to 1 percent slopes, occasionally flooded, very brief duration
CrA	Crosby silt loam, 0 to 3 percent slopes	SteA	Starks silt loam, 0 to 2 percent slopes
FcA	Fincastle silt loam, 0 to 3 percent slopes	SteA	Starks silt loam, 0 to 2 percent slopes
SteA	Starks silt loam, 0 to 2 percent slopes	SteA	Starks silt loam, 0 to 2 percent slopes
Wh	Whitaker silt loam	SteA	Starks silt loam, 0 to 2 percent slopes
CrA	Crosby silt loam, 0 to 3 percent slopes	 StjA 	Starks-Crosby silt loams, 0 to 2 percent slopes
StjA		 StjA 	
HeF	Hennepin loam, 25 to 50 percent slopes	SvqG	Strawn loam, 25 to 70 percent slopes
SvqG	Strawn loam, 25 to 70 percent slopes	SvqG	Strawn loam, 25 to 70 percent slopes
HeF	Hennepin loam, 25 to 50 percent slopes	 SvzG 	Strawn-Rock outcrop complex, 35 to 70 percent slopes
SvzG	Strawn-Rock outcrop complex, 35 to 70 percent slopes	 SvzG 	Strawn-Rock outcrop complex, 35 to 70 percent slopes
Bs	 Brookston silty clay loam	ThrA	Treaty silty clay loam, 0 to 1 percent slopes
ThrA	Treaty silty clay loam, 0 to 1 percent slopes	ThrA	Treaty silty clay loam, 0 to 1 percent slopes
Gravel	Gravel Pit	Uaz	Udorthents, sandy
Uaz	Udorthents, sandy	Uaz	Udorthents, sandy
Borrow	Borrow Pit	Uby	Udorthents, loamy
Uby	Udorthents, loamy	Uby	Udorthents, loamy
CrA	Crosby silt loam, 0 to 3 percent slopes	 UfnA 	Urban land-Crosby complex, 0 to 2 percent slopes

Field symbols	Field map unit name	Publi- cation symbol	Approved map unit name
UfnA	Urban land-Crosby complex, 0 to 2 percent slopes	 UfnA 	Urban land-Crosby complex, 0 to 2 percent slopes
Ra	Ragsdale silty clay loam	 UfoA 	Urban land-Cyclone complex, 0 to 1 percent slopes
RbfA	Ragsdale silty clay loam, 0 to 1 percent slopes	 UfoA 	Urban land-Cyclone complex, 0 to 1 percent slopes
UfoA	Urban land-Cyclone complex, 0 to 1 percent slopes	 UfoA 	Urban land-Cyclone complex, 0 to 1 percent slopes
FcA	Fincastle silt loam, 0 to 3 percent slopes	UfxA	Urban land-Fincastle complex, 0 to 2 percent slopes
Re	Reesville silt loam	 UfxA 	Urban land-Fincastle complex, 0 to 2 percent slopes
UfxA	Urban land-Fincastle complex, 0 to 2 percent slopes	 UfxA 	Urban land-Fincastle complex, 0 to 2 percent slopes
Ма	Mahalasville silty clay loam	 UhuA 	Urban land-Mahalasville complex, 0 to 1 percent slopes
UhuA	Urban land-Mahalasville complex, 0 to 1 percent slopes	 UhuA 	Urban land-Mahalasville complex, 0 to 1 percent slopes
MmB2	Miami silt loam, 2 to 6 percent slopes, eroded	 UkbB 	Urban land-Miami complex, 2 to 6 percent slopes
UkbB	Urban land-Miami complex, 2 to 6 percent slopes	UkbB	Urban land-Miami complex, 2 to 6 percent slopes
MmC2	Miami silt loam, 6 to 12 percent slopes, eroded	UkbC	Urban land-Miami complex, 6 to 12 percent slopes
MsC3	Miami clay loam, 6 to 12 percent slopes, severely eroded	UkbC	Urban land-Miami complex, 6 to 12 percent slopes
UkbC	Urban land-Miami complex, 6 to 12 percent slopes	UkbC	Urban land-Miami complex, 6 to 12 percent slopes
MmD2	Miami silt loam, 12 to 18 percent slopes, eroded	 UkbD 	Urban land-Miami complex, 12 to 18 percent slopes
MsD3	Miami clay loam, 12 to 18 percent slopes, severely eroded	UkbD	Urban land-Miami complex, 12 to 18 percent slopes
UkbD	Urban land-Miami complex, 12 to 18 percent slopes	 UkbD 	Urban land-Miami complex, 12 to 18 percent slopes
FsA	Fox silt loam, 0 to 2 percent slopes	 UkpA 	Urban land-Ockley complex, 0 to 2 percent slopes
OcA	Ockley silt loam, 0 to 2 percent slopes	 UkpA 	Urban land-Ockley complex, 0 to 2 percent slopes
UkpA	Urban land-Ockley complex, 0 to 2 percent slopes	 UkpA 	Urban land-Ockley complex, 0 to 2 percent slopes
OcB2	Ockley silt loam, 2 to 6 percent slopes, eroded	 UkpB 	Urban land-Ockley complex, 2 to 6 percent slopes
UkpB	Urban land-Ockley complex, 2 to 6 percent slopes	 UkpB 	Urban land-Ockley complex, 2 to 6 percent slopes
Bs	Brookston silty clay loam	 UmyA 	Urban land-Treaty complex, 0 to 1 percent slopes
UmyA	Urban land-Treaty complex, 0 to 1 percent slopes	 UmyA 	Urban land-Treaty complex, 0 to 1 percent slopes

Field symbols	Field map unit name	Publi- cation symbol	Approved map unit name
MmA	Miami silt loam, 0 to 2 percent slopes	UnhA	Urban land-Wawaka complex, 0 to 2 percent slopes
UnhA	Urban land-Wawaka complex, 0 to 2 percent slopes	UnhA	Urban land-Wawaka complex, 0 to 2 percent slopes
UnuA	Urban land-Whitaker complex, 0 to 2 percent slopes	UnuA	Urban land-Whitaker complex, 0 to 2 percent slopes
Wh	Whitaker silt loam	UnuA	Urban land-Whitaker complex, 0 to 2 percent slopes
CrA	Crosby silt loam, 0 to 3 percent slopes	UnvB	Urban land-Williamstown-Crosby complex, 2 to 4 percent slopes
CsB2	Crosby-Miami silt loams, 2 to 6 percent slopes, eroded	UnvB	Urban land-Williamstown-Crosby complex, 2 to 4 percent slopes
UnvB	Urban land-Williamstown-Crosby complex, 2 to 4 percent slopes	UnvB	Urban land-Williamstown-Crosby complex, 2 to 4 percent slopes
Usl	Udorthents, rubbish	Usl	Udorthents, rubbish
W	Water	W	Water
Water	Water	W	 Water
MmA	 Miami silt loam, 0 to 2 percent slopes	WdrA	 Wawaka silt loam, 0 to 2 percent slopes
WdrA	 Wawaka silt loam, 0 to 2 percent slopes	WdrA	 Wawaka silt loam, 0 to 2 percent slopes
MmB2	Miami silt loam, 2 to 6 percent slopes, eroded	WdrB2	 Wawaka silt loam, 2 to 6 percent slopes, eroded
WdrB2	Wawaka silt loam, 2 to 6 percent slopes, eroded	WdrB2	Wawaka silt loam, 2 to 6 percent slopes, eroded
MmC2	Miami silt loam, 6 to 12 percent slopes, eroded	WdrC2	Wawaka silt loam, 6 to 12 percent slopes, eroded
WdrC2	Wawaka silt loam, 6 to 12 percent slopes, eroded	WdrC2	Wawaka silt loam, 6 to 12 percent slopes, eroded
MmD2	Miami silt loam, 12 to 18 percent slopes, eroded	WdrD2	Wawaka silt loam, 12 to 18 percent slopes, eroded
WdrD2	Wawaka silt loam, 12 to 18 percent slopes, eroded	WdrD2	Wawaka silt loam, 12 to 18 percent slopes, eroded
St		WmnA	Waynetown silt loam, 0 to 2 percent slopes
WmnA	 Waynetown silt loam, 0 to 2 percent slopes	WmnA	 Waynetown silt loam, 0 to 2 percent slopes
CrA		WofB	 Williamstown-Crosby silt loams, 2 to 4 percent slopes
CsB2	Crosby-Miami silt loams, 2 to 6 percent slopes, eroded	WofB	Williamstown-Crosby silt loams, 2 to 4 percent slopes
WofB	Williamstown-Crosby silt loams, 2 to 4 percent slopes	WofB	Williamstown-Crosby silt loams, 2 to 4 percent slopes
We	Westland silty clay loam	WqvA	Westland silty clay loam, 0 to 1 percent slopes
WqvA	Westland silty clay loam, 0 to 1 percent slopes	WqvA	Westland silty clay loam, 0 to 1 percent slopes
Wh	 Whitaker silt loam	WtaA	 Whitaker silt loam, 0 to 2 percent slopes
	 Whitaker silt loam, 0 to 2 percent slopes	WtaA	 Whitaker silt loam, 0 to 2 percent slopes

Field symbols	Field map unit name I		Approved map unit name
MmB2	Miami silt loam, 2 to 6 percent slopes, eroded	XfuB2	Miami-Rainsville complex, 2 to 6 percent slopes, eroded
XfuB2	Miami-Rainsville complex, 2 to 6 percent slopes, eroded	 XfuB2 	Miami-Rainsville complex, 2 to 6 percent slopes, eroded
MmC2	Miami silt loam, 6 to 12 percent slopes, eroded	 XfuC2 	Miami-Rainsville complex, 6 to 12 percent slopes, eroded
XfuC2	Miami-Rainsville complex, 6 to 12 percent slopes, eroded	XfuC2	Miami-Rainsville complex, 6 to 12 percent slopes, eroded

Series established by this correlation: None

Series Made Inactive: None

Series dropped from the 1975 soil survey report: Brookston, Genesee, Hennepin, Ragsdale, and Reesville

Established Series added to the correlation legend: Beckville, Camden, Cyclone, Eel, Landes, Mahalaland, Medway, Rainsville, Rodman, Rossburg, Senachwine, Southwest, Starks, Strawn, Treaty, Wawaka, Waynetown, and Williamstown

Verification of exact cooperator names: For the front cover and half-title page:

United States Department of Agriculture,
Natural Resources Conservation Service
in cooperation with Purdue University Agricultural Experiment Station,
and Indiana Department of Natural Resources, State Soil Conservation
Board and Division of Soil Conservation

The cooperators to be listed on the inside of the front cover are the same as those on the front cover, and in addition state: "This soil survey update is part of the technical assistance provided to Boone County Soil and Water Conservation District. Financial assistance was made available by the Boone County Soil and Water Conservation District and the Boone County Commissioners."

Prior soil survey publications: The last soil survey of Boone County was completed in 1970 and was published by the United States Department of Agriculture, Soil Conservation Service in 1975. Reference to the prior soil survey will be included in the literature citation of the manuscript. This survey replaces the 1975 soil survey and provides additional data, updated soil interpretations, and digital soil maps at a 1:12,000 scale on an orthophoto base.

Join Statements: Boone County, which was published in 1975, joins five modern soil surveys. These are Clinton, Hamilton, Hendricks, Marion, and Montgomery Counties in Indiana. Clinton County to the north was published in 1980. Hamilton County to the east was published in 1978. Hendricks County to the southwest was published in 1974. Marion County to the southeast was published in 1978. Montgomery County to the west was published in 1989. An exact join will be completed when these counties are updated to the MLRA legend.

Disposition of field sheets: The original soil maps used for the 1975 Soil Survey Report were ratioed and then converted from the scale of 1:15,840 to 1:12,000. These maps were then compiled onto mylars which were orthophoto quarter quads at a scale of 1:12,000. Geographic area to the county boundaries was compiled, i.e. compilation was to the county line resulting in partial compilation of quarter quads along county boundaries. The compiled maps were delivered to the Indianapolis Digitizing Center in May 2002. Copies of a computer tape of the final product will remain at the state office, be certified for SSURGO at NCGC, and be provided to the Boone County Board as part of the cost share cooperative agreement.

Instructions for map compilation and map finishing: Map compilation was completed by the Central Indiana MLRA Project Office in April 2002. Soils, water, and cultural features were compiled onto the orthophoto quarter quads. The orthophoto quarter quads and supporting documentation were delivered to the Indianapolis Digitizing Center in May 2002. Symbols for map finishing will be those approved for SSURGO standards and as shown in this document. The Indianapolis Digitizing Center will complete a final check before delivering the product to NCGC for SSURGO certification.

Conventional And Special Symbols Legend: Conventional and special symbol legend: only those symbols indicated on the attached NRCS-SOILS-37A will be shown on the legend and placed on the maps.

NRCS SOILS 37A Indiana Official 37A Compilation, Digitizing and DMF June 28, 2001

CONVENTIONAL AND SPECIAL SYMBOLS LEGEND

DESCRIPTION	SYMBOL	DESCRIPTION	SYMBOL	DESCRIPTION	1	SYMBOL	
CULTURAL FEATUR	RES	SPECIAL SYMBOLS F			LS F	OR SOIL SUF	RVEY
		AND SSURGO SOIL DELINEATIONS AND SYMBOLS	DAM	AND SSURGO			
BOUNDARIES		SOIL DELINEATIONS AND STIMBULS	Fe BeC	RECOMMENDED AD HOC SOIL S	YMBOLS		
National, state, or province		\ \ \	LEVEE M-W	SYMBOL_ID DCS 1	*	SYMBOL_ID CRO 23	ð
County or parish		LANDFORM FEATURES ESCARPMENTS		DKS 2	п	MIA 24	•
Minor civil division		Bedrock	***************	OVW 3 VMS 4	_ ¥	CGM 25 26	• ⊕
WINOT CIVIL DIVISION		Other than bedrock SHORT STEEP SLOPE	• • • • • • • • • • • • • • • • • • • •	EAS 5	ц	27	Ф
Reservation (Military)		GULLY	***************************************	MAS 6 SAS 7	` ≡ . B	28 29	⊗ ⊗
Land grant (Optional)		LEVEES † Single side slope		CAF 8	•	MUC 30	¤
		‡ Single side slope (showing actual feature location)		CAL 9		31	0
OTHER BOUNDARY (label)		DEPRESSION, closed SINKHOLE	♦ ♦	SLR 10 DUM 11	⇔ *	32 33	0
Airport (Label only)	Davis Airport or Airstrip	EXCAVATIONS		BRV 12 BRM 13	•	34 MRL 35	Φ
LAND DIVISION CORNERS (section and land grants)	- + + +	PITS Borrow pit		BRD 14	<u>.</u>	36	*
GEOGRAPHIC COORDINATE TICK		Gravel pit Mine or quarry	× *	OBR 15 SSR 16	7 8	37 38	+
ROAD EMBLEMS & DESIGNATIONS	+	MISCELLANEOUS SURFACE FEATURES	•	LBR 17 WDP 18	*	39 VSE 40	#
	₩ ₩	Blowout	⊌	SBR 19	×	41	+
Interstate	79 79 345	Clay spot Gravelly spot	*	COB 20 CNS 21	.V.	42 43	‡ <
Federal	410 410 224	Marsh or swamp	₩	FES 22		45 UWT 44	•
State	62 (52) (347)	Rock outcrop (includes sandstone and					
	347	Sandy spot Severely eroded spot	× ÷				
HYDROGRAPHIC FEA	ATURES	Slide or slip	}				
	III O II LL	Spoil area Stony spot	≣ 0				
STREAMS		Very stony spot	ο _ο Ψ				
Double line Unclassified (single line)		Wet spot	Y				
	\sim						
Drainage end							

[‡] Denotes SSURGO features and symbol.

LABEL	NAME	DESCRIPITION
ERO	Severely eroded spot	An area where on the average 75 percent or more of the original surface layer has been lost because of accelerated erosion. Not used in map units that are named severely eroded, very severely eroded, or gullied. Typically 0.2 to 2 acres.
ESB	Escarpment, bedrock	A relatively continuous and steep slope or cliff, which was produced by erosion or faulting, that breaks the general continuity of more gently sloping land surfaces. Exposed material is hard or soft bedrock.
ESO	Escarpment, other than bedrock	A relatively continuous and steep slope or cliff, which generally is produced by erosion but can be produced by faulting, that breaks the continuity of more gently sloping land surfaces. Exposed earthy material is nonsoil or very shallow soil.
GPI	Gravel pit	An open excavation from which soil and underlying material have been removed and used, without crushing, as a source of sand or gravel. Typically 0.2 to 2 acres.
MUC	Muck spot	An area within a poorly drained or very poorly drained soil that has a histic epipedon or where the surface is organic. The spot symbol is used only in map units consisting of mineral soil. Typically 0.2 to 2 acres.
SAN	Sandy spot	A spot where the surface layer is loamy fine sand or coarser in areas where the surface layer of the named soils in the surrounding map unit is very fine sandy loam or finer. Typically 0.2 to 2 acres.
SLP	Short, steep slope	Narrow soil area that has slopes that are at least two slope classes steeper than the slope class of the surrounding map unit.
UWT	Unclassified water	Small, natural or man-made lake, pond, or pit that contains water, of an unspecified nature, most of the year. Typically 0.2 to 2 acres.
WET	Wet spot	A somewhat poorly drained to very poorly drained area that is at least two drainage classes wetter than the named soils in the surrounding map unit. Typically 0.2 to 2 acres.

SOIL MAPUNIT SYMBOL CONVERSION LEGEND BOONE COUNTY, INDIANA: DETAILED SOIL MAP LEGEND

Field symbols	Publi- cation symbol	Field symbols	Publi- cation symbol	 Field symbols 	Publication
Borrow	Uby	FsA	UkpA	MmD2	WdrD2
Br	SnlAP	FsB2	FexB2	MmE2	SigE2
Bs	ThrA	FsC2	FexC2	MmoB3	MmoB3
Bs	UmyA	Gn	EdeAW	MmoC3	MmoC3
CbaA	CbaA	Gn	MjkAH	MmoD3	MmoD3
CrA	CudA	Gn	RtuAH	MnpB2	MnpB2
CrA	FdhA	Gravel	Ppu	MnpC2	MnpC2
CrA	SteA	Gravel	Uaz	 MnpD2	 MnpD2
CrA	StjA	HeF	SvqG	 MsB3	MmoB3
CrA	UfnA	HeF	SvzG	MsC3	MmoC3
CrA	UnvB	Ма	MamA	MsC3	UkbC
CrA	WofB	Ма	MaoA	MsD3	MmoD3
CsB2	UnvB	Ма	UhuA	MsD3	UkbD
CsB2	WofB	MamA	MamA	ObxA	ObxA
CudA	CudA	MaoA	MaoA	ObxB2	ObxB2
CxdA	CxdA	MjkAH	MjkAH	OcA	CbaA
EdeAK	EdeAW	MmA	UnhA	OcA	ObxA
EdeAK	MjkAH	MmA	WdrA	OcA	RqpG
EdeAK	RtuAH	MmB2	MnpB2	OcA	UkpA
EdeAW	EdeAW	MmB2	UkbB	OcB2	ObxB2
FcA	FdbA	MmB2	WdrB2	OcB2	UkpB
FcA	SteA	MmB2	XfuB2	Ppu	Ppu
FcA	UfxA	MmC2	MnpC2	 Ra	CxdA
FdbA	FdbA	MmC2	UkbC	 Ra	UfoA
FdhA	 FdhA	MmC2	WdrC2	RbfA	CxdA
FexB2	FexB2	MmC2	XfuC2	RbfA	UfoA
FexC2	FexC2	MmD2	MnpD2	 Re	FdbA
FsA	ObxA	MmD2	UkbD	 Re	UfxA

SOIL MAPUNIT SYMBOL CONVERSION LEGEND BOONE COUNTY, INDIANA: DETAILED SOIL MAP LEGEND

 Field s 	ymbols	Publi- cation symbol
RqpG		 RqpG
RtuAH		 RtuAH
Sh		 SldAH
Sh		 SldAW
 SigE2		 SigE2
 SldAH		 SldAH
SldAW		 SldAW
SngA		 SngA
SnlAP		 SnlAP
SocAH		 SocAH
SocAW		SocAW
 St		 SngA
St		WmnA
SteA		 SteA
 StjA		 StjA
 SvqG		SvqG
SvzG		SvzG
Sx		Socah
Sx		SocAW
 ThrA		 ThrA
Uaz		Uaz
Uby		Uby
 UfnA		UfnA
UfoA		 UfoA
UfxA		 UfxA
UhuA		 UhuA
 UkbB		UkbB
UkbC		UkbC

 Field symbols 	 Publi- cation symbol
UkbD	UkbD
UkpA	UkpA
UkpB	UkpB
UmyA	UmyA
UnhA	UnhA
UnuA	UnuA
UnvB	UnvB
Usl	Usl
w	 W
Water	W
WdrA	WdrA
WdrB2	WdrB2
WdrC2	WdrC2
WdrD2	WdrD2
We	MaoA
We	WqvA
 Wh	SteA
Wh	UnuA
Wh	WtaA
WmnA	WmnA
WofB	WofB
WqvA	WqvA
WtaA	WtaA
 XfuB2 	XfuB2
 XfuC2 	XfuC2
l ————	l ———

CLASSIFICATION OF PEDONS SAMPLED FOR LABORATORY ANALYSIS BOONE COUNTY, INDIANA

Purdue lab data:

	Soil			Pub	
Site ID	Series	Type of Site	LAB	Symbol	Approved series and map unit
S68IN6-3	Brookston	Purdue sample site	Purdue	ThrA	Treaty silty clay loam, 0 to 1 percent slopes
S69IN6-2	Brookston	Purdue sample site	Purdue	ThrA	Treaty silty clay loam, 0 to 1 percent slopes
S69IN6-1	Crosby	Purdue sample site	Purdue	CudA	Crosby silt loam, 0 to 2 percent slopes
S69IN6-3	Crosby	Purdue sample site	Purdue	CudA	Crosby silt loam, 0 to 2 percent slopes
S69IN6-4	Crosby	Purdue sample site	Purdue	CudA	Crosby silt loam, 0 to 2 percent slopes
S69IN6-5	Crosby	Purdue sample site	Purdue	CudA	Crosby silt loam, 0 to 2 percent slopes
S69IN6-6	Crosby	Purdue sample site	Purdue	CudA	Crosby silt loam, 0 to 2 percent slopes
S68IN6-5	Fincastle	Purdue sample site	Purdue	FdbA	Fincastle silt loam, 0 to 2 percent slopes
S68IN6-1	Miami	Purdue sample site	Purdue	MnpC2	Miami silt loam, 6 to 12 percent slopes, eroded
S68IN6-7	Miami	Purdue sample site	Purdue	XfuB2	Miami-Rainsville complex, 2 to 6 percent slopes, eroded
S68IN6-2	Ragsdale	Purdue sample site	Purdue	CxdA	Cyclone silty clay loam, 0 to 1 percent slopes
S68IN6-4	Ragsdale	Purdue sample site		CxdA	Cyclone silty clay loam, 0 to 1 percent slopes
S68IN6-8	Whitaker	Purdue sample site	Purdue	WtaA	Whitaker silt loam, 0 to 2 percent slopes

National Soil Survey Lab Data:

	Soil				Pub	
Site ID	Series	Type of	Site	LAB	Symbol	Approved series and map unit
S81IN-011-	Miami	Neutron	probe	NSSL	WdrA	Wawaka silt loam, 0 to 2
001		study				percent slopes
S81IN-011-	Miami	Neutron	probe	NSSL	FdbA	Fincastle silt loam, 0 to 2
002		study				percent slopes
S81IN-011-	Fox	Neutron	probe	NSSL	FexB2	Fox loam, 2 to 6 percent
003		study				slopes, eroded
S81IN-011-	Fox	Neutron	probe	NSSL	ObxA	Ockley silt loam, 0 to 2
004		study				percent slopes
S81IN-011-	Fox	Neutron	probe	NSSL	ObxA	Ockley silt loam, 0 to 2
005		study				percent slopes
S81IN-011-	Miami	Neutron	probe	NSSL	XfuB2	Miami-Rainsville complex, 2 to
006		study				6 percent slopes, eroded
S81IN-011-	Fox	Neutron	probe	NSSL	ObxB2	Ockley silt loam, 2 to 6
007		study				percent slopes, eroded
S81IN-011-	SND	Neutron	probe	NSSL	ObxA	Ockley silt loam, 0 to 2
800		study				percent slopes
S81IN-011-	Fox	Neutron	probe	NSSL	ObxA	Ockley silt loam, 0 to 2
009		study				percent slopes

S81IN-011- SND 010 Soi Site ID Ser S81IN-011- SND 011 S81IN-011- Mia 012 S81IN-011- SND 013 S81IN-011- Fox 014 S81IN-011- Fox 015 S81IN-011- Mia 016	study lies Type of Neutron study mi Neutron study Neutron study Neutron study Neutron study	site probe probe probe	NSSL LAB NSSL NSSL NSSL	Pub symbol WdrA WdrA WdrA	Miami-Rainsville complex, 2 to 6 percent slopes, eroded Approved series and map unit Wawaka silt loam, 0 to 2 percent slopes Wawaka silt loam, 0 to 2 percent slopes Wawaka silt loam, 0 to 2
Soite ID Ser S81IN-011- SND 011 S81IN-011- Mia 012 S81IN-011- SND 013 S81IN-011- Fox 014 S81IN-011- Mia	I ies Type of Neutron study mi Neutron study Neutron study Neutron study Neutron study Neutron	probe probe probe	NSSL NSSL NSSL	Symbol WdrA WdrA	Approved series and map unit Wawaka silt loam, 0 to 2 percent slopes Wawaka silt loam, 0 to 2 percent slopes Wawaka silt loam, 0 to 2
Site ID Ser S81IN-011- SND 011 S81IN-011- Mia 012 S81IN-011- SND 013 S81IN-011- Fox 014 S81IN-011- Fox 015 S81IN-011- Mia	ies Type of Neutron study mi Neutron study Neutron study Neutron study Neutron study Neutron	probe probe probe	NSSL NSSL NSSL	Symbol WdrA WdrA	Wawaka silt loam, 0 to 2 percent slopes Wawaka silt loam, 0 to 2 percent slopes Wawaka silt loam, 0 to 2
S81IN-011- SND 011 S81IN-011- Mia 012 S81IN-011- SND 013 S81IN-011- Fox 014 S81IN-011- Fox 015 S81IN-011- Mia	Neutron study mi Neutron study Neutron study Neutron study Neutron study Neutron study	probe probe probe	NSSL NSSL NSSL	WdrA WdrA WdrA	Wawaka silt loam, 0 to 2 percent slopes Wawaka silt loam, 0 to 2 percent slopes Wawaka silt loam, 0 to 2
011 S81IN-011- Mia 012 S81IN-011- SND 013 S81IN-011- Fox 014 S81IN-011- Fox 015 S81IN-011- Mia	study Mi Neutron study Neutron study Neutron study Neutron study Neutron	probe probe	NSSL NSSL	WdrA WdrA	percent slopes Wawaka silt loam, 0 to 2 percent slopes Wawaka silt loam, 0 to 2
S81IN-011- Mia 012 S81IN-011- SND 013 S81IN-011- Fox 014 S81IN-011- Fox 015 S81IN-011- Mia	mi Neutron study Neutron study Neutron study Neutron study Neutron	probe	NSSL	WdrA	Wawaka silt loam, 0 to 2 percent slopes Wawaka silt loam, 0 to 2
012 S81IN-011- SND 013 S81IN-011- Fox 014 S81IN-011- Fox 015 S81IN-011- Mia	study Neutron study Neutron study Neutron	probe	NSSL	WdrA	percent slopes Wawaka silt loam, 0 to 2
S81IN-011- SND 013 S81IN-011- Fox 014 S81IN-011- Fox 015 S81IN-011- Mia	Neutron study Neutron study Neutron	probe			Wawaka silt loam, 0 to 2
013 S81IN-011- Fox 014 S81IN-011- Fox 015 S81IN-011- Mia	study Neutron study Neutron	probe			
S81IN-011- Fox 014 S81IN-011- Fox 015 S81IN-011- Mia	Neutron study Neutron		NSSL	FevCo	
014 S81IN-011- Fox 015 S81IN-011- Mia	study Neutron		NSSL	FovC2	percent slopes
S81IN-011- Fox 015 S81IN-011- Mia	Neutron	nroho		I CACA	Fox loam, 6 to 12 percent
015 S81IN-011- Mia		nroho			slopes, eroded
S81IN-011- Mia		br ope	NSSL	FexC2	Fox loam, 6 to 12 percent
		_			slopes, eroded
016	mi Neutron	probe	NSSL	XfuB2	Miami-Rainsville complex, 2 to
	study	_			6 percent slopes, eroded
S86IN-011- SND	Marriage	b	NSSL	T-7 -3 7	Wawaka silt loam, 0 to 2
001 SND		probe	NSSL	WdrA	
	study	1	NOOT	III - 31 - 3	percent slopes
S86IN-011- SND 002		probe	NSSL	FdbA	Fincastle silt loam, 0 to 2
	study	1	NOCT	- DO	percent slopes
S86IN-011- SND		probe	NSSL	FexB2	Fox loam, 2 to 6 percent
003	study	1	NOCT	01 7	slopes, eroded
S86IN-011- SND		probe	NSSL	ObxA	Ockley silt loam, 0 to 2
004	study			-1 -	percent slopes
S86IN-011- SND		probe	NSSL	ObxA	Ockley silt loam, 0 to 2
005	study				percent slopes
S86IN-011- SND		probe	NSSL	XfuB2	Miami-Rainsville complex, 2 to
006	study				6 percent slopes, eroded
S86IN-011- SND	Neutron	probe	NSSL	ObxB2	Ockley silt loam, 2 to 6
007	study	-			percent slopes, eroded
S86IN-011- SND	Neutron	probe	NSSL	ObxA	Ockley silt loam, 0 to 2
008	study	-			percent slopes
S86IN-011- SND	Neutron	probe	NSSL	ObxA	Ockley silt loam, 0 to 2
009	study	-			percent slopes
S86IN-011- SND	Neutron	probe	NSSL	XfuB2	Miami-Rainsville complex, 2 to
010	study	-			6 percent slopes, eroded
GOCTN 011 GND		1	NOOT	T-T-1 70	Wanala 1
S86IN-011- SND	Neutron study	probe	NSSL	WdrA	Wawaka silt loam, 0 to 2
011	_	1	MOGT	T-7 - 7 7	percent slopes
S86IN-011- SND		probe	NSSL	WdrA	Wawaka silt loam, 0 to 2
012	study	1	NOCT		percent slopes
S86IN-011- SND		probe	NSSL	WdrA	Wawaka silt loam, 0 to 2
013	study	1	NICCI	DC2	percent slopes
S86IN-011- SND		probe	NSSL	FexC2	Fox loam, 6 to 12 percent
014	study		270.07	- ~~	slopes, eroded
S86IN-011- SND		probe	NSSL	FexC2	Fox loam, 6 to 12 percent
015	study		12000		slopes, eroded
S86IN-011- SND		probe	NSSL	XfuB2	Miami-Rainsville complex, 2 to
016	study				6 percent slopes, eroded

Notes to Accompany the Classification and Correlation of the Soils of Boone County, Indiana

by Bennie Clark, Jr., MLRA Project Leader, Mike Wigginton, Subset Project Leader, and Tonie Endres, Soil Data Quality Specialist

Beckville Series - Previously correlated as consociations of Genesee series and Shoals series. Beckville soils are in association with Eel soils on narrow flood plains of minor tributaries. Beckville soils are also in association with Medway soils on flood plains of larger streams such as Eagle, Sugar, and Prairie Creeks. Slope, flooding frequency, and flooding duration are added to the map unit names. The typical pedon for the taxonomic unit is the OSD type location in Montgomery County, Indiana.

Camden Series - Previously correlated as Ockley series. Acreage in Boone County is minimal but the CbaA map unit is needed to join with Montgomery County. The typical pedon for the taxonomic unit is from Tippecanoe County, Indiana.

Crosby Series - Previously correlated on 0 to 3 percent slopes. The component with 2 to 3 slopes is minor and is re-correlated to WofB Williamstown-Crosby silt loams, 2 to 4 percent slopes. The typical pedon for the taxonomic unit is the OSD type location in Henry County, Indiana.

Cyclone Series - Previously correlated as Ragsdale series. Ragsdale soils will be restricted to areas of thicker loess to the west and on large terraces or broad uplands in MLRA 111. Transect data in Boone County shows an average of 51 inches of loess over a loamy wash over till. Slope is added to the map unit name. The typical pedon for the taxonomic unit is the OSD type location in Clinton County, Indiana.

The Cyclone soils in Boone County are questionable as to whether an argillic horizon is present. This is a MLRA classification issue and several series are involved. Additional field investigation across the MLRA is needed to address this issue.

Eel Series - Previously correlated as a consociation of Genesee series. Eel soils are in association with Beckville soils on narrow flood plains of minor tributaries. Slope, flooding frequency, and flooding duration are added to the map unit name. The typical pedon for the taxonomic unit is the OSD type location in Randolph County, Indiana.

Fincastle Series - Previously correlated on 0 to 3 percent slopes. The component with 2 to 3 percent slopes is minor and is re-correlated to WofB Williamstown-Crosby silt loams, 2 to 4 percent slopes. Transects support a complex of Fincastle and Crosby soils in areas near and along the Clinton County line. In other areas of the county, Fincastle soils are mapped as a consociation. Slope range is changed to 0 to 2 percent. The typical pedon for the taxonomic unit is the OSD type location in Rush County, Indiana.

Fox Series - Soils previously correlated as FsA are re-correlated as Ockley series (ObxA). Transect data shows that the dominant surface texture in the B2 and C2 map units is loam rather than silt loam as previously correlated. The Fox soils in Boone County have a loamy coarse sand texture in the substratum which is not defined as part of the Fox series range. These soils are not considered to be taxadjuncts. The typical pedon for the taxonomic unit is from Boone County, Indiana (FexB2). This pedon is located at one of the neutron probe study sites, S81IN-011-003.

Landes Series - Previously correlated as a consociation of Genesee series. Landes

soils are in association with Rossburg soils on the flood plains of Eagle, Sugar, and Prairie Creeks. Slope, flooding frequency, and flooding duration are added to the map unit name. The typical pedon for the taxonomic unit is from Boone County, Indiana.

Mahalaland Series - Previously correlated as Mahalasville series and Westland series. Acreage in Boone County is minimal but the MaoA map unit is needed to join with Montgomery County. The typical pedon for the taxonomic unit is the OSD type location in Tippecanoe County, Indiana.

Mahalasville Series - Loess thickness of the typical pedon is 40 inches, the maximum thickness allowed for the series. Average loess thickness in Boone County based on transects is 40.15 inches. Slope is added to the map unit name. The typical pedon for the taxonomic unit is from Montgomery County, Indiana.

Medway Series - Previously correlated as a consociation of Genesee series. Medway soils are in association with Beckville soils on the flood plains of Eagle, Sugar, and Prairie Creeks. Slope, flooding frequency, and flooding duration are added to the map unit name. The typical pedon for the taxonomic unit is from Boone County, Indiana.

Miami Series - Soils previously correlated as MmA are re-correlated as Wawaka series. Map units of MmB2, MmC2, and MmD2 in areas adjacent to the MmA map units are also re-correlated as Wawaka series. The typical pedon for the taxonomic unit is the OSD type location in Hendricks County, Indiana.

Ockley Series - The ObxB2 map unit has inclusions of soils that have a till substratum. The typical pedon for the taxonomic unit is the OSD type location in Rush County, Indiana.

Rainsville Series - These soils were previously included with Miami soils. Transect data supports a complex with Miami soils in the area near Thorntown. The typical pedon for the taxonomic unit is the OSD type location in Warren County, Indiana.

Rodman Series - Previously included as escarpments in terrace soils. Rodman soils are in complex with rock outcrops along the Montgomery County line. Field investigation verifies its occurrence in Boone County. Acreage is minimal but the RqpG map unit is needed to join with Montgomery County. The typical pedon for the taxonomic unit is the OSD type location in Fountain County, Indiana.

Rossburg Series - Previously correlated as a consociation of Genesee series. Rossburg soils are in association with Landes soils on the flood plains of Eagle, Sugar, and Prairie Creeks. Slope, flooding frequency, and flooding duration are added to the map unit name. The typical pedon for the taxonomic unit is from Boone County, Indiana.

Senachwine Series - Previously correlated as Miami series. Based on transect data, the SigE2 map unit has both moderately well drained and well drained components. Well drained is considered to be more representative on these slopes. The typical pedon for the taxonomic unit is from Boone County, Indiana.

The Senachwine soils in Boone County have dense till in the substratum (Cd or 2Cd horizon). The moist bulk density is higher than defined as typical for the Senachwine series. However, these soils are not considered to be taxadjuncts. Tables will be adjusted to reflect the higher bulk density. Additional field work is needed throughout MLRA 111 to determine the extent of these soils.

Shoals Series - Slope, flooding frequency, and flooding duration are added to the map unit name. The typical pedon for the taxonomic unit is from Montgomery County,

Indiana.

Sleeth Series - Sleeth soils in Boone County have inclusions of soils that have a till substratum. Slope is added to the map unit name. The typical pedon for the taxonomic unit is from Boone County, Indiana. The pedon is near the original typical pedon for the county (same delineation).

Sloan Series - Slope, flooding frequency, and flooding duration are added to the map unit name. The typical pedon for the taxonomic unit is the OSD type location in Mercer County, Ohio.

Southwest Series - Previously correlated as an overwash phase of Brookston with 10 to 20 inches of overwash. A description of a representative pedon from a transect shows a 13 inch layer of overwash over a buried mollic epipedon and argillic horizon (combined thickness of the buried diagnostic horizons is 24 inches). This pedon fits the definition of a buried soil since the surface mantle is "30 to 50 cm thick and has a thickness that equals at least half the total thickness of the named diagnostic horizons that are preserved in the buried soil." These soils fit, in general, the series concept of Southwest. The thickness of the overwash in Boone County is outside the defined range of 20 to 40 inches for the Southwest series, but these soils are not considered to be taxadjuncts. The typical pedon for the taxonomic unit is the OSD type location in Elkhart County, Indiana.

Starks Series - Previously correlated as Crosby series and Fincastle series and in some cases Whitaker series. Transect data in the west central part of the county shows areas of outwash underlying the loess mantle. Map units in these areas are re-correlated as a consociation of Starks soils or as a complex of Starks and Crosby soils. In some areas till is found within a depth of 60 to 80 inches. Slope is added to the map unit name. The typical pedon for the taxonomic unit is from Tippecanoe County, Indiana.

Strawn Series - Previously correlated as Hennepin series. Strawn soils are in complex with rock outcrops along the Montgomery County line. Field investigation verifies its occurrence in Boone County. The typical pedon for the taxonomic unit is from Boone County, Indiana.

Treaty Series - Previously correlated as Brookston series. Slope is added to the map unit name. The typical pedon for the taxonomic unit is the OSD type location in Montgomery County, Indiana.

Udorthents - Three map units of Udorthents are added to the legend for areas of cut and fill, landfills, abandoned sand and gravel pits, etc.

Urban land - Thirteen map unit complexes are added to the legend. Delineations will be based on current aerial photography and soil lines from the previously published soil survey. These map units will be used in and around the towns of Lebanon and Zionsville.

Wawaka Series - Previously correlated as Miami series in the northwest part of the county. Numerous sand and gravel pits are nearby. The Wawaka soils in Boone County have a 2C horizon rather than a 2C/Bt horizon as is typical for the series, but these soils are not considered to be taxadjuncts. The typical pedon was described from a core. It's possible that a 2C/Bt could have been identified in a pit. The typical pedon for the taxonomic unit is from Boone County, Indiana.

Waynetown Series - Previously correlated as Sleeth series. Acreage in county is minimal but the WmnA map unit is needed to join with Montgomery County. Slope is added to the map unit name. The typical pedon for the taxonomic unit is the OSD type location in Montgomery County, Indiana.

Westland Series - Previously correlated as Westland series. Slope is added to the map unit name. The typical pedon for the taxonomic unit is from Wayne County, Indiana.

Whitaker Series - Slope is added to the map unit name. The typical pedon for the taxonomic unit is from Boone County, Indiana. The pedon is near the original typical pedon for the county (same delineation).

Williamstown Series - Previously correlated as a complex of Crosby and Miami series and as a consociation of Crosby series. Dominant slope range is 2 to 4 percent. The typical pedon for the taxonomic unit is the OSD type location in Decatur County, Indiana.

PRIME FARMLAND BOONE COUNTY, INDIANA

CbaA	Camden silt loam, 0 to 2 percent slopes
CudA	Crosby silt loam, 0 to 2 percent slopes (Prime farmland if drained)
'xdA	Cyclone silty clay loam, 0 to 1 percent slopes (Prime farmland if drained)
deAW	Eel and Beckville soils, 0 to 2 percent slopes, occasionally flooded, very brief duration
dbA	Fincastle silt loam, 0 to 2 percent slopes (Prime farmland if drained)
dhA	Fincastle-Crosby silt loams, 0 to 2 percent slopes (Prime farmland if drained)
exB2	Fox loam, 2 to 6 percent slopes, eroded
IamA	Mahalasville silty clay loam, 0 to 1 percent slopes (Prime farmland if drained)
laoA	Mahalaland silty clay loam, 0 to 1 percent slopes (Prime farmland if drained)
ljkAH	Medway and Beckville soils, 0 to 2 percent slopes, frequently flooded, brief duration (Prime farmland if protected from flooding or not frequently flooded during the growing season)
inpB2	Miami silt loam, 2 to 6 percent slopes, eroded
inpbz bxA	Ockley silt loam, 0 to 2 percent slopes
bxB2	Ockley silt loam, 2 to 6 percent slopes, eroded
tuAH	Rossburg and Landes soils, 0 to 2 percent slopes, frequently flooded, brief
cuAii	duration (Prime farmland if protected from flooding or not frequently flooded during the growing season)
SldAH	Shoals silt loam, 0 to 2 percent slopes, frequently flooded, brief duration (Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season)
SldAW	Shoals silt loam, 0 to 2 percent slopes, occasionally flooded, very brief duration (Prime farmland if drained)
SnqA	Sleeth silt loam, 0 to 2 percent slopes (Prime farmland if drained)
Socah	Sloan silty clay loam, 0 to 1 percent slopes, frequently flooded, brief duration (Prime farmland if drained and either protected from flooding or not frequently flooded during the growing season)
ocAW	Sloan silty clay loam, 0 to 1 percent slopes, occasionally flooded, very brief duration (Prime farmland if drained)
teA	Starks silt loam, 0 to 2 percent slopes (Prime farmland if drained)
tjA	Starks-Crosby silt loams, 0 to 2 percent slopes (Prime farmland if drained)
hrA	Treaty silty clay loam, 0 to 1 percent slopes (Prime farmland if drained)
drA	Wawaka silt loam, 0 to 2 percent slopes
drB2	Wawaka silt loam, 2 to 6 percent slopes, eroded
mnA	Waynetown silt loam, 0 to 2 percent slopes (Prime farmland if drained)
ofB	Williamstown-Crosby silt loams, 2 to 4 percent slopes (Prime farmland if drained
qvA	Westland silty clay loam, 0 to 1 percent slopes (Prime farmland if drained)
taA	Whitaker silt loam, 0 to 2 percent slopes (Prime farmland if drained)
fuB2	Miami-Rainsville complex, 2 to 6 percent slopes, eroded

CLASSIFICATION OF THE SOILS BOONE COUNTY, INDIANA

Soil name	Family or higher taxonomic class					
Beckville	Coarse-loamy, mixed, superactive, mesic Fluvaquentic Eutrudepts					
Camden	Fine-silty, mixed, superactive, mesic Typic Hapludalfs					
Crosby	Fine, mixed, active, mesic Aeric Epiagualfs					
Cyclone	Fine-silty, mixed, superactive, mesic Typic Argiaquolls					
Eel	Fine-loamy, mixed, superactive, mesic Fluvaquentic Eutrudepts					
Fincastle	Fine-silty, mixed, superactive, mesic Aeric Epiaqualfs					
Fox	Fine-loamy over sandy or sandy-skeletal, mixed, superactive, mesic					
	Typic Hapludalfs					
Landes	Coarse-loamy, mixed, superactive, mesic Fluventic Hapludolls					
Mahalaland	Fine-silty, mixed, superactive, mesic Typic Argiaquolls					
Mahalasville	Fine-silty, mixed, superactive, mesic Typic Argiaquolls					
Medway	Fine-loamy, mixed, superactive, mesic Fluvaquentic Hapludolls					
Miami	Fine-loamy, mixed, active, mesic Oxyaquic Hapludalfs					
Ockley	Fine-loamy, mixed, active, mesic Typic Hapludalfs					
Rainsville	Fine-loamy, mixed, active, mesic Oxyaquic Hapludalfs					
Rodman	Sandy-skeletal, mixed, mesic Typic Hapludolls					
Rossburg	Fine-loamy, mixed, superactive, mesic Fluventic Hapludolls					
Senachwine	Fine-loamy, mixed, active, mesic Typic Hapludalfs					
Shoals	Fine-loamy, mixed, superactive, nonacid, mesic Fluvaquentic					
	Endoaquepts					
Sleeth	Fine-loamy, mixed, active, mesic Aeric Endoaqualfs					
Sloan	Fine-loamy, mixed, superactive, mesic Fluvaquentic Endoaquolls					
Southwest	Fine-silty, mixed, superactive, nonacid, mesic Typic Fluvaquents					
Starks	Fine-silty, mixed, superactive, mesic Aeric Endoaqualfs					
Strawn	Fine-loamy, mixed, active, mesic Typic Hapludalfs					
Treaty	Fine-silty, mixed, superactive, mesic Typic Argiaquolls					
Udorthents, loamy	Udorthents					
Udorthents, rubbish	Udorthents					
Udorthents, sandy	Udorthents					
Wawaka	Fine-loamy, mixed, active, mesic Typic Hapludalfs					
Waynetown	Fine-silty, mixed, superactive, mesic Aeric Endoaqualfs					
Westland	Fine-loamy, mixed, superactive, mesic Typic Argiaquolls					
Whitaker	Fine-loamy, mixed, active, mesic Aeric Endoaqualfs					
Williamstown	Fine-loamy, mixed, active, mesic Aquic Hapludalfs					

CERTIFICATION STATEMENT

The MLRA Region 11 Team Leader certifies that:

- a. The fieldwork activities were completed in June 2002.
- Boone County joins the following survey areas:
 Clinton County to the north was published in 1980.
 Hamilton County to the east was published in 1978.
 Hendricks County to the southwest was published in 1974.
 Marion County to the southeast was published in 1978.
 Montgomery County to the west was published in 1989.

An exact join will be completed when these counties are updated to the MLRA legend.

- c. The location of all typical pedons has been checked for correct location and for the soil delineations using that name. Typical pedons are those that represent the taxonomic units in MLRA 111. Not all typical pedons are located in Boone County, but are within other subsets of MLRA 111.
- d. All typical pedons are classified according to Keys to Soil Taxonomy, Eighth edition, 1998.
- e. The digital soil maps once completed will be reviewed for accuracy and consistency.

Approval Signatures and Date

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